

**IN THE CLAIMS:**

Please rewrite Claim 44 as set forth below in clean form. Additionally, in accordance with 37 CFR 1.121(c)(1)(ii), amended Claim 44 is set forth in a marked up version in the pages attached to this amendment.

44. (Twice Amended) A method for analyzing an arthropod sample for the presence of one or more analytes associated with an arthropod-carried agent that causes a disease in mammals, said method comprising the steps of:

obtaining an arthropod sample suspected of containing arthropod-borne agents;

*D* grinding the sample in solution to expose an analyte associated with the arthropod-carried agent such that the sample contains arthropod debris after grinding;

contacting the sample containing arthropod debris with a liquid permeable support and at least one detectable analyte-specific reagent that binds to the analyte to form an analyte-reagent complex;

allowing the liquid phase to move vertically upward through the support by capillary flow or wicking until the analyte or the analyte-specific reagent or the analyte-specific reagent complex binds to at least one capture reagent immobilized on the support; and

detecting the presence of the detectable analyte-specific reagent indicating the presence of the analyte in the sample.

**Please add Claims 63-92 as follows:**

*P 2*  
63. (New) A method for analyzing an arthropod sample for the presence of one or more analytes associated with an arthropod-carried agent that causes a disease in mammals, said method comprising the steps of:

obtaining an arthropod sample suspected of containing arthropod-borne agents;

grinding the sample in solution to expose an analyte associated with the arthropod-carried agent such that the sample contains arthropod debris after grinding;

contacting the sample containing arthropod debris with a dipstick and at least one detectable analyte-specific reagent that binds to the analyte to form an analyte-reagent complex;

allowing the liquid phase to move through the dipstick until the analyte or the analyte-specific reagent or the analyte-specific reagent complex binds to at least one capture reagent immobilized on the dipstick; and

detecting the presence of the detectable analyte-specific reagent indicating the presence of the analyte in the sample.

64. (New) The method of claim 63, wherein the detectable analyte-specific reagent further comprises a detectable moiety selected from the group consisting of a colored moiety, a magnetic moiety, a radioactive moiety and an enzyme.

65. (New) The method of claim 63, wherein the detectable analyte-specific reagent is deposited on the support prior to contacting the sample.

66. (New) The method of claim 63, wherein the arthropod-carried agent is a togavirus.

67. (New) The method of claim 66, wherein the togavirus is an encephalitis virus.

68. (New) The method of claim 66, wherein the togavirus is a flavivirus.

69. (New) The method of claim 68, wherein the flavivirus is Dengue.

70. (New) The method of claim 68, wherein the flavivirus is an encephalitis virus.

71. (New) The method of claim 70, wherein the encephalitis virus is West Nile Fever.

72. (New) The method of claim 63, wherein the arthropod is a mosquito.

73. (New) The method of claim 63, wherein the sample is homogenized with a grinding solution prior to contact with said support.

74. (New) The method of claim 63, wherein the support further comprises a control area having immobilized therein at least one reagent suitable for capturing the detectable analyte-specific reagent.

75. (New) The method of claim 63, wherein the analyte-specific reagent is a monoclonal antibody.

76. (New) The method of claim 63, wherein the detectable analyte-specific reagent comprises gold-antibody conjugates.

77. (New) The method of claim 63, wherein the detectable analyte-specific reagents comprises colored latex-antibody conjugates.

78. (New) The method of claim 63, wherein at least three detectable analyte-specific reagents for at least three different arthropod-carried agents associated with human malaria are employed and the support comprises at least three capture reagents immobilized onto at least three different detection areas.

79. (New) A method for analyzing an arthropod sample for the presence of one or more analytes associated with an arthropod-carried agent that causes a disease in mammals, said method comprising the steps of:

obtaining an arthropod sample suspected of containing arthropod-borne agents;

grinding the sample in solution to expose an analyte associated with the arthropod-carried agents such that the sample contains arthropod debris after grinding;

contacting the sample containing arthropod debris with a panel assay having capture reagents immobilized onto separate areas and detectable analyte-specific reagents

specific for an analyte associated with each arthropod-borne agent to which the capture reagents are directed;

allowing the liquid phase to move vertically upward through the panel assay by capillary flow or wicking until the analyte or one of the analyte-specific reagents binds to one of the capture reagents; and

detecting the presence of the analyte-specific reagents indicating the presence of the analyte in the sample.

80. (New) The method of claim 79, wherein one of the analyte-specific reagents further comprises a detectable moiety selected from the group consisting of a colored moiety, a magnetic moiety, a radioactive moiety and an enzyme.

81. (New) The method of claim 79, wherein one of the detectable analyte-specific reagents is deposited on the support prior to contacting the sample.

82. (New) The method of claim 79, wherein one of the arthropod-carried agents is a togavirus.

D2  
83. (New) The method of claim 82, wherein the togavirus is an encephalitis virus.

84. (New) The method of claim 82, wherein the togavirus is a flavivirus.

85. (New) The method of claim 84, wherein the flavivirus is Dengue.

86. (New) The method of claim 84, wherein the flavivirus is an encephalitis virus.

87. (New) The method of claim 86, wherein the encephalitis virus is West Nile Fever.

88. (New) The method of claim 79, wherein the arthropod is a mosquito.

89. (New) The method of claim 79, wherein the sample is homogenized with a grinding solution prior to contact with said panel assay.

90. (New) The method of claim 79, wherein one of the analyte-specific reagents is a monoclonal antibody.

91. (New) The method of claim 79, wherein one of the detectable analyte-specific reagents comprises gold-antibody conjugates.

*DZ  
concl'd.* 92. (New) The method of claim 79, wherein one of the plurality of detectable analyte-specific reagents comprises colored latex-antibody conjugates.